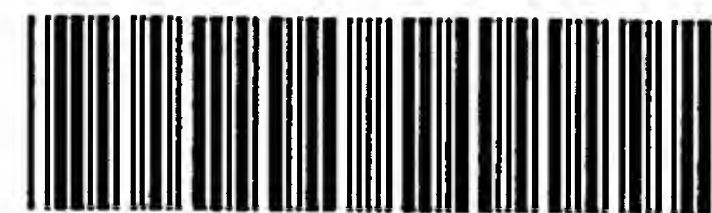


## **RAW SEQUENCE LISTING**

**The Biotechnology Systems Branch of the Scientific and Technical  
Information Center (STIC) no errors detected.**

Application Serial Number: 10/530,658  
Source: IFWP  
Date Processed by STIC: 08/04/2006

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IFWP

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PATENT APPLICATION: US/10/530,658

DATE: 08/04/2006

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Output Set: N:\CRF4\08042006\J530658.raw

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3 <110> APPLICANT: FOTI, MARIA
4      LOHMER, STEFAN
6 <120> TITLE OF INVENTION: PHOTOPROTEIN WITH IMPROVED BIOLUMINESCENCE
8 <130> FILE REFERENCE: 100506-00025
10 <140> CURRENT APPLICATION NUMBER: 10/530,658
11 <141> CURRENT FILING DATE: 2005-04-07
13 <150> PRIOR APPLICATION NUMBER: PCT/EP03/011626
14 <151> PRIOR FILING DATE: 2003-10-21
16 <150> PRIOR APPLICATION NUMBER: EP 02023452.2
17 <151> PRIOR FILING DATE: 2002-10-21
19 <160> NUMBER OF SEQ ID NOS: 9
21 <170> SOFTWARE: PatentIn Ver. 3.3
23 <210> SEQ ID NO: 1
24 <211> LENGTH: 662
25 <212> TYPE: DNA
26 <213> ORGANISM: Obelia longissima
28 <400> SEQUENCE: 1
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30 aatgtcttca aaatacgagc ttaaactcaa gactgacttt gataatccac gatggatcaa 120
31 aagacacaag cacatgtttg atttcctcga catcaatgga aatggaaaaa tcaccctcga 180
32 tgaaattgtg tccaaggcat ctgatgacat atgtgccaaag ctggaagcca caccagaaca 240
33 aacaaaacgc catcaagttt gtggtgaagc tttctttaga ggatgtggaa tggaatatgg 300
34 taaagaaatt gccttcccac aattcctcga tggatggaaa caattggcga cttcagaact 360
35 caagaaatgg gcaagaaacg aacctactct cattcgtgaa tggggagatg ctgtctttga 420
36 tatttttcgac aaagatggaa gtggtacaat cactttggac gaatggaaag cttatggaaa 480
37 aatctctggt atctctccat cacaagaaga ttgtgaagcg acatttcgac attgcgattt 540
38 ggacaacagt ggtgaccttg atgttgacga gatgacaaga caacatcttg gattctggta 600
39 cactttggac ccagaagctg atggtctcta tggcaacgga gttccctaag ctttttttcg 660
40 aa 662
43 <210> SEQ ID NO: 2
44 <211> LENGTH: 195
45 <212> TYPE: PRT
46 <213> ORGANISM: Obelia longissima
48 <400> SEQUENCE: 2
49 Met Ser Ser Lys Tyr Ala Val Lys Leu Lys Thr Asp Phe Asp Asn Pro
50 1 5 10 15
52 Arg Trp Ile Lys Arg His Lys His Met Phe Asp Phe Leu Asp Ile Asn
53 20 25 30
55 Gly Asn Gly Lys Ile Thr Leu Asp Glu Ile Val Ser Lys Ala Ser Asp
56 35 40 45
58 Asp Ile Cys Ala Lys Leu Glu Ala Thr Pro Glu Gln Thr Lys Arg His
59 50 55 60
61 Gln Val Cys Val Glu Ala Phe Phe Arg Gly Cys Gly Met Glu Tyr Gly

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62 65          70          75          80
64 Lys Glu Ile Ala Phe Pro Gln Phe Leu Asp Gly Trp Lys Gln Leu Ala
65          85          90          95
67 Thr Ser Glu Leu Lys Lys Trp Ala Arg Asn Glu Pro Thr Leu Ile Arg
68          100         105         110
70 Glu Trp Gly Asp Ala Val Phe Asp Ile Phe Asp Lys Asp Gly Ser Gly
71          115         120         125
73 Thr Ile Thr Leu Asp Glu Trp Lys Ala Tyr Gly Lys Ile Ser Gly Ile
74          130         135         140
76 Ser Pro Ser Gln Glu Asp Cys Glu Ala Thr Phe Arg His Cys Asp Leu
77 145         150         155         160
79 Asp Asn Ser Gly Asp Leu Asp Val Asp Glu Met Thr Arg Gln His Leu
80          165         170         175
82 Gly Phe Trp Tyr Thr Leu Asp Pro Glu Ala Asp Gly Leu Tyr Gly Asn
83          180         185         190
85 Gly Val Pro
86          195
89 <210> SEQ ID NO: 3
90 <211> LENGTH: 195
91 <212> TYPE: PRT
92 <213> ORGANISM: Artificial Sequence
94 <220> FEATURE:
95 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
96     chimeric protein sequence
98 <400> SEQUENCE: 3
99 Met Ser Ser Lys Tyr Ala Val Lys Leu Lys Thr Asp Phe Asp Asn Pro
100  1          5          10         15
102 Arg Trp Ile Lys Arg His Lys His Met Phe Asp Phe Leu Asp Ile Asn
103          20         25         30
105 Gly Asn Gly Lys Ile Thr Leu Asp Glu Ile Val Ser Lys Ala Ser Asp
106          35         40         45
108 Asp Ile Cys Ala Lys Leu Gly Ala Thr Pro Glu Gln Thr Lys Arg His
109          50         55         60
111 Gln Asp Ala Val Glu Ala Phe Phe Lys Lys Ile Gly Met Asp Tyr Gly
112 65          70          75          80
114 Lys Glu Val Glu Phe Pro Ala Phe Val Asp Gly Trp Lys Glu Leu Ala
115          85          90          95
117 Thr Ser Glu Leu Lys Lys Trp Ala Arg Asn Glu Pro Thr Leu Ile Arg
118          100         105         110
120 Glu Trp Gly Asp Ala Val Phe Asp Ile Phe Asp Lys Asp Gly Ser Gly
121          115         120         125
123 Thr Ile Thr Leu Asp Glu Trp Lys Ala Tyr Gly Lys Ile Ser Gly Ile
124          130         135         140
126 Ser Pro Ser Gln Glu Asp Cys Glu Ala Thr Phe Arg His Cys Asp Leu
127 145         150         155         160
129 Asp Asn Ser Gly Asp Leu Asp Val Asp Glu Met Thr Arg Gln His Leu
130          165         170         175
132 Gly Phe Trp Tyr Thr Leu Asp Pro Glu Ala Asp Gly Leu Tyr Gly Asn
133          180         185         190

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135 Gly Val Pro

136 195

139 &lt;210&gt; SEQ ID NO: 4

140 &lt;211&gt; LENGTH: 600

141 &lt;212&gt; TYPE: DNA

142 &lt;213&gt; ORGANISM: Artificial Sequence

144 &lt;220&gt; FEATURE:

145 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic  
146 chimeric nucleotide sequence

148 &lt;400&gt; SEQUENCE: 4

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149 ggatccgccg ccatgtcttc aaaatacgca gttaaactca agactgactt tgataatcca 60
150 cgatggatca aaagacacaa gcacatgttt gatttcctcg acatcaatgg aaatggaaaa 120
151 atcaccctcg atgaaattgt gtccaaggca tctgatgaca tatgcgccaa acttggagca 180
152 acaccagaac agaccaaacg tcaccaggat gctgtcgaag ctttcttcaa aaagattggg 240
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154 acttcagaac tcaagaaatg ggcaagaaac gaacctactc tcattcgtga atggggagat 360
155 gctgtctttg atattttcga caaagatgga agtgggtacaa tcactttgga cgaatggaaa 420
156 gcttatggaa aaatctctgg tatctctcca tcacaagaag attgtgaagc gacatttcga 480
157 cattgcgatt tggacaacag tggtgacctt gatgttgacg agatgacaag acaacatctt 540
158 ggattctggg acactttgga cccagaagct gatggtctct atggcaacgg agttccctaa 600

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161 &lt;210&gt; SEQ ID NO: 5

162 &lt;211&gt; LENGTH: 607

163 &lt;212&gt; TYPE: DNA

164 &lt;213&gt; ORGANISM: Artificial Sequence

166 &lt;220&gt; FEATURE:

167 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic  
168 chimeric nucleotide sequence

170 &lt;400&gt; SEQUENCE: 5

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171 ggatccgccg ccatgtcttc aaaatacgca gttaaactca agactgactt tgataatcca 60
172 cgatggatca aaagacacaa gcacatgttt gatttcctcg acatcaatgg aaatggaaaa 120
173 atcaccctcg atgaaattgt gtccaaggca tctgatgaca tctgcgccaa actgggagca 180
174 acaccagaac agaccaaacg gcaccaggat gctgtcgaag ctttcttcaa aaagattggg 240
175 atggattatg gtaaagaagt cgaattccca gcttttggtg atggatggaa agaattggcg 300
176 acttcagaac tcaagaaatg ggcaagaaac gaacctactc tcattcgtga atggggagat 360
177 gctgtctttg atattttcga caaagatgga agtgggtacaa tcactttgga cgaatggaaa 420
178 gcttatggaa aaatctctgg tatctctcca tcacaagaag attgtgaagc gacatttcga 480
179 cattgcgatc tggacaacag tggcgacctg gatgttgact agatgacaag acaacatctt 540
180 ggattctggg acactttgga cccagaagct gatggcctct atggcaacgg agttccctaa 600
181 gaattcc 607

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184 &lt;210&gt; SEQ ID NO: 6

185 &lt;211&gt; LENGTH: 70

186 &lt;212&gt; TYPE: DNA

187 &lt;213&gt; ORGANISM: Artificial Sequence

189 &lt;220&gt; FEATURE:

190 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic  
191 primer

193 &lt;400&gt; SEQUENCE: 6

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194 tatgcgccaa acttggagca acaccagaac agaccaaacg tcaccaggat gctgtcgaag 60
195 ctttcttcaa 70

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TIME: 12:32:29

Input Set : A:\10050625.APP

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198 <210> SEQ ID NO: 7
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200 <212> TYPE: DNA
201 <213> ORGANISM: Artificial Sequence
203 <220> FEATURE:
204 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
205     primer
207 <400> SEQUENCE: 7
208 tttttgaaga aagcttcgac agcatcctgg tgacgtttgg tctggttctgg tgttgctcca 60
209 agtttggcgc a 71
212 <210> SEQ ID NO: 8
213 <211> LENGTH: 62
214 <212> TYPE: DNA
215 <213> ORGANISM: Artificial Sequence
217 <220> FEATURE:
218 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
219     primer
221 <400> SEQUENCE: 8
222 aaagattggt atggattatg gtaaagaagt cgaattccca gcttttggtg atggatggaa 60
223 ag 62
226 <210> SEQ ID NO: 9
227 <211> LENGTH: 63
228 <212> TYPE: DNA
229 <213> ORGANISM: Artificial Sequence
231 <220> FEATURE:
232 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
233     primer
235 <400> SEQUENCE: 9
236 aattctttcc atccatcaac aaaagctggg aattcgactt ctttaccata atccatacca 60
237 atc 63

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**VERIFICATION SUMMARY**

**PATENT APPLICATION: US/10/530,658**

**DATE: 08/04/2006**

**TIME: 12:32:30**

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